

ABSTRACT OF THE DISCLOSURE

A scan path is formed by successively connecting the flip-flop FF11x located at the head of the xth stage to the flip-flop FF1mx located at the end of the xth stage in series. The scan path connects the scan input SIN with the input terminal of the flip-flop FF11n located at the head of the nth stage, and successively connects the flip-flop arranged in the second to (n-1)th stages in series, after restarting from the output terminal of the flip-flop FF1mn located at the end of the nth stage. The output terminal of the flip-flop FF1m(n-1) located at the end of the (n-1)th stage is connected with the input terminal of the flip-flop FF111 located at the head of the first stage, and, finally, the output terminal of the flip-flop FF1m1 located at the end of the first stage is connected with the scan output SOT.